LineUp with Math™ Alignment
Core Curriculum Content Standards for Mathematics

STANDARD 4.1 NUMBER AND NUMERICAL OPERATIONS
All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.

Strand 4.1.6 A. Number Sense

Cumulative Progress Indicators	***LineUp with Math*™ Activities**
4. Explore the use of ratios and proportions in a variety of situations.	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.
5. Understand and use whole-number percents between 1 and 100 in a variety of situations.	--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Strand 4.1.6 C. Estimation

Cumulative Progress Indicators	***LineUp with Math*™ Activities**
3. Determine the reasonableness of an answer by estimating the result of operations.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

STANDARD 4.5 MATHEMATICAL PROCESSES
All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

Strand 4.5 A. Problem Solving

Cumulative Progress Indicators	***LineUp with Math*™ Activities**
2. Solve problems that arise in mathematics and in other contexts. • Open-ended problems • Non-routine problems • Problems with multiple solutions • Problems that can be solved in several ways	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
3. Select and apply a variety of appropriate problem-solving strategies (e.g., "try a simpler problem" or "make a diagram") to solve problems.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

Strand 4.5 B. Communication	
Cumulative Progress Indicators	***LineUp with Math™* Activities**
2. Communicate mathematical thinking coherently and clearly to peers, teachers, and others, both orally and in writing.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
4. Use the language of mathematics to express mathematical ideas precisely.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
Strand 4.5 C. Connections	
Cumulative Progress Indicators	***LineUp with Math™* Activities**
3. Recognize that mathematics is used in a variety of contexts outside of mathematics.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
4. Apply mathematics in practical situations and in other disciplines.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
Strand 4.5 E. Representations	
Cumulative Progress Indicators	***LineUp with Math™* Activities**
3. Use representations to model and interpret physical, social, and mathematical phenomena.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
Strand 4.5 F. Technology	
Cumulative Progress Indicators	***LineUp with Math™* Activities**
1. Use technology to gather, analyze, and communicate mathematical information.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.